# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

APPLICANT: Michael D. Laufer, et al. CONFIRMATION NO. 3758

SERIAL NO.: 10/735,349

FILING DATE: December 11, 2003

TITLE: FAT REMOVAL AND NERVE PROTECTION DEVICE AND

METHOD

EXAMINER: STEPHENS, Jacqueline F.

ART UNIT: 3761

### APPEAL BRIEF UNDER 37 C.F.R. § 41.37

#### MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant hereby submits this Brief in support of his/her appeal from a final decision by the Examiner, mailed on March 17, 2009, in the above-referenced case. The Appellant respectfully requests consideration of this appeal by the Board of Patent Appeals and Interferences for allowance of the above-referenced patent application.

# Table of Contents

I.	REAL PARTY IN INTEREST	. 3
II.	RELATED APPEALS AND INTERFERENCES	. 4
III.	STATUS OF CLAIMS	. 5
IV.	STATUS OF AMENDMENTS	. 6
V.	SUMMARY OF THE CLAIMED SUBJECT MATTER	. 7
VI.	GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL	. 8
VII.	ARGUMENT	9
	.CONCLUSION	
APP	ENDIX A: CLAIMS	13
APP	ENDIX B: EVIDENCE	14
APP	ENDIX C: RELATED PROCEEDINGS	15

# I. REAL PARTY IN INTEREST

The real party in interest is Tony R. Brown, an individual. The assignment was previously submitted and was recorded on May 3, 2004 at Reel 015294 Frame 0389.

# II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

# III. STATUS OF CLAIMS

Claims 55-60 are under appeal.

Claims 1-54 and 61-91 have been canceled.

# IV. STATUS OF AMENDMENTS

With the filing of this Brief, all Amendments have been entered and considered by the Examiner.

#### V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The invention relates to surgical tools used to remove fatty tissue. One particular application is the removal of fat from the surface of an organ in order to provide access to the surface for surgical procedures. In the case of coronary bypass surgery, for example, often a layer of fatty tissue must be removed from around the heart to expose the myocardial tissue that is to be treated. The procedure is delicate and must take care not damage important arteries, veins and nerves that may be present, to avoid grievous injury or death.

Claim 55 is directed to a method for removing fatty tissue while protecting nerves, and is best explained with reference to FIGS. 26-33. The method includes exposing a portion of the fatty tissue (¶ [0117], l. 2; ¶ [0120], l. 2; ¶ [0126], l. 2), pressing the fatty tissue (¶ [0117], ll. 3-4; ¶ [0120], ll. 3-4) with a non-convex surface (screen 1020, FIGS. 27 and 29; screen 1106, FIGS. 30 and 31; plate 1206, FIGS. 32 and 33) having at least one hole (1022, FIG. 27; 1022, FIG. 29; 1108, FIG. 30; 1210, FIG. 33), extruding fat through the at least one hole (¶ [0117], l. 4; ¶ [0120], ll. 4-5; ¶ [0126], ll. 3-4), the hole being dimensioned to allow fat cells to extrude through while preventing nerves from passing therethrough (see ¶ [0116], and ¶ [0127], ll. 2-4), and cutting the fat that has extruded through the hole on a side of the surface opposite the fatty tissue (¶ [0117], ll. 4-7; ¶ [0120], l. 7; ¶ [0126], l. 5).

# VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on appeal are:

- Whether claims 55-60 are unpatentable under 35 U.S.C. §102(b) as being anticipated by <u>Halverson</u> (U.S. Patent No. 6,071,260, hereinafter, "<u>Halverson</u>").
- Whether claim 57 is unpatentable under 35 U.S.C. §103(a) as being obvious over
   <u>Halverson</u> as applied to claim 55 in view of Bass (U.S. Publication No. 2003/0176851, hereinafter, "Bass")

#### VII. ARGUMENT

#### Claims 55-60 are not Anticipated by Halverson

#### Claims 55 and 58-60

Claim 55, from which claims 58-60 depend, recites cutting fat that has extruded through at least one hole in a non-convex surface on a side of the surface opposite the fatty tissue. This feature is not disclosed in <a href="Halverson">Halverson</a>. The device of <a href="Halverson">Halverson</a> relies entirely on ultrasonic energy to cavitate or emulsify fatty tissue.

The Final Office Action alleges that <u>Halverson</u>, in the discussion of the prior art in column 1, lines 53-60, discloses cutting fat that has extruded through a hole on a side of the surface opposite the fatty tissue. Appellants respectfully disagree. The discussion in column 1, lines 53-60 of <u>Halverson</u> merely points out the disadvantages of shearing fat cells off, rather than heating and melting them as <u>Halverson</u> proposes. No details of the shearing are provided, and certainly no discussion of extruding them through suitably-dimensioned holes of a surface and cutting them on the opposite side.

The Final Office Action also alleges that <u>Halverson</u> discloses extruding fat through a hole dimensioned to allow fat cells to extrude through while preventing nerves from passing therethrough, pointing to column 3, lines 64-65, and column 7, lines 1-4 of <u>Halverson</u> for this feature. However, column 3, lines 64-65 merely states that an object of <u>Halverson</u>'s invention is to provide a device which minimizes injury to nerves and blood vessels and overall trauma. It does not explain how this is accomplished, and does not describe extruding fat through a hole dimensioned to allow fat cells to extrude through while preventing nerves from passing

9

therethrough. Similarly, column 7, lines 1-4 of <u>Halverson</u> merely mention reducing bleeding and nerve injury, and fail to describe how this is accomplished.

Applicants respectfully submit that <u>Halverson</u> in fact teaches away from the invention as claimed, by boasting that, in his disclosed method, "there is reduced tearing stretching or heating of the tissue and <u>no removing of chunks of tissue either due to cutting or high suction pressure."</u>

#### Claim 56

Claim 56 is patentable over <u>Halverson</u> by virtue of its dependency from claim 55. In addition, claim 56 states that the step of extruding fat further comprises "the step of preventing nerves from passing through said at least one hole while permitting blood vessels to pass therethrough." The Final Office Action includes claim 56 with the rejection of claim 55, referring to the same passages from <u>Halverson</u> to reject claim 56 without expressly addressing the limitations of claim 56. These passages from <u>Halverson</u>, however, lump together the discussion of nerves and blood vessels, and make no differentiation between them in manner of claim 56. Similarly, <u>Halverson</u>, in column 6, lines 30, justifies the shape of his device by its effectiveness in pushing "large blood vessels and verves out of the way to one side or the other to reduce trauma to the patient and reduce loss of feeling and excessive loss of blood." No differentiation between the treatment of blood vessels and nerves is provided. For this reason, and by virtue of its dependency from claim 55, claim 56 is patentable over <u>Halverson</u>.

<sup>&</sup>lt;sup>1</sup> Halverson, col. 7, II. 8-11, emphasis added.

<sup>&</sup>lt;sup>2</sup> Col. 3, II. 64-65 states that an object of <u>Halverson</u>'s invention is to provide a device which minimizes injury to <u>nerves and blood vessels</u>; col. 7, II. 1-4 states that that <u>Halverson</u>'s method reduces bleeding and injury to nerves.

#### Claim 57

Claim 57 depends from claim 55 and is patentable for the reasons articulated above. In addition, claim 57 recites cutting the extruded fat with an electrocautory element. This is not disclosed in <a href="Halverson">Halverson</a>, and claim 57 is therefore patentable over <a href="Halverson">Halverson</a> for this reason as well.

### Claim 57 Is Not Obvious Over Halverson in View of Bass

#### Claim 57

Claim 57 depends from claim 55 and is patentable for the reasons articulated above.

These reasons are not cured by <u>Bass</u> since <u>Bass</u> does not does not disclose or suggest cutting fat that has extruded through at least one hole in a non-convex surface on a side of the surface opposite the fatty tissue. <u>Bass</u> removes fat through cauterization, not cutting as presently claimed.

Attorney Docket No. 436565-018

VIII. Conclusion

For the foregoing reasons, Appellant respectfully asserts that Claims 55-60 are patentable

over the cited references. For the reasons presented herein, the reversal of the present rejections

and allowance of the present claims is respectfully requested.

The fee required under 37 C.F.R. §41.37(a) and 1.17(c), is being paid through the EFS

payment screen. The USPTO is directed and authorized to charge all required fees, except for

the Issue Fee and the Publication Fee, to Deposit Account No. 50-3557. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

Registration No. 38,745

Khaled Shami

NIXON PEABODY LLP 200 Page Mill Road, 2nd Floor

Palo Alto, CA 94306 Telephone: (650) 320-7725

Date:

September 17, 2009

12

#### APPENDIX A: CLAIMS

- 55. A method of removing fatty tissue while protecting nerves, comprising the steps of: exposing a portion of said fatty tissue; pressing said fatty tissue with a non-convex surface having at least one hole; extruding fat through said at least one hole, the hole being dimensioned to allow fat cells to extrude through while preventing nerves from passing therethrough; and
- cutting said fat that has extruded through said hole on a side of said surface opposite said fatty tissue.
- 56. A method in accordance with Claim 55, wherein said step of extruding fat further comprises the step of preventing nerves from passing through said at least one hole while permitting blood vessels to pass therethrough.
- 57. A method in accordance with Claim 55, wherein said step of cutting said fat further comprises cutting said fat with an electrocautery cutting element.
- 58. A method in accordance with Claim 55, further comprising heating said fatty tissue at a time selected from the group consisting of prior to said cutting step, during said cutting step, and both prior and during said cutting step.
- 59. A method in accordance with Claim 55, wherein said step of pressing said fat layer further comprises pressing with a surface having at least one hole located on a distalmost end of a wand.
- 60. A method in accordance with Claim 55, wherein said step of pressing said fat layer further comprises pressing with a surface having at least one hole located proximal of a distalmost end of a wand.

# APPENDIX B; EVIDENCE

NONE.

# APPENDIX C: RELATED PROCEEDINGS

NONE.